

REMARKS

Reconsideration of the application is requested in view of the remarks below.

Rejection Under 35 USC 102

The Office Action rejected Claims 1-8 under 35 USC 102 over U.S. Pat. No. 5,279,945 (Hummel). The rejection should be withdrawn in view of the remarks below.

It is well settled that in order for a prior art reference to anticipate claim, the reference must disclose each and every element of a claim with sufficient clarity to prove its existence in prior art. The disclosure requirement under 35 USC 102 presupposes knowledge of one skilled in the art of claimed invention, but such presumed knowledge does not grant license to read into prior art reference teachings that are not there. *See Motorola Inc. v. Interdigital Technology Corp.* 43 USPQ2d 1481 (1997 CAFC).

Hummel discloses an analytical method for determining aspartame concentration which can be carried out with relatively stable and readily available enzyme products, which takes place smoothly. The method involves bringing about an enzymatic reaction for detecting the products thereof which is cocatalyzed by adenine dinucleotide, by either (a) reacting the resulting aspartate acid by means of an enzyme-containing cell extract which converts aspartic acid in the presence of NADP^+ , with the addition of NADP^+ , and measuring the concentration of the aspartame via the formation of NADPH or NH_3 or (b) detaching the ester group from the phenylalanine methyl ester enzymatically by means of chymotrypsin and converting the resulting L-phenylalanine enzymatically by means of phenylalanine dehydrogenase in the presence of NAD^+ into phenylpyruvate, and measuring the aspartame concentration via the formation of NADH or NH_3 .

Hummel appears to exhibit an indirect method for determining the concentration of aspartic acid in a water sample and not polyaspartic acid. Aspartic acid is therefore reacted with nicotinamide adenine dinucleotide phosphate (NADP) in the presence of a cell extract which catalyzes the NADP^+ to produce an aspartic reaction product NH_4^+ and NADPH . At least the nicotinamide adenine dinucleotide phosphate (NADPH) is determined physically, for instance by fluorimetry. The

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concentration of aspartame is then produced by calculation.

This is not what Applicants claim. Hummel does not disclose a method comprising performing a concentration determination of polyaspartic acids and/or salts thereof in aqueous systems by fluorometry. Applicants have found that the polyaspartic acid itself and prepared according to page 4 lines 4-13 of the specification can be determined by fluorometry because the polymer itself shows fluorescence. With such effect it is possible to determine the polyaspartic acid concentration directly and not by its degradation products.

The prior art discloses that only two methods for fluorometric determination of such polymers: One method involves adding a tracer to the polycarboxylate and determining the tracer by fluorometric methods. This way is not precise enough because even the tracer might react with metallic surfaces and will lead to lower concentrations by calculation. Another method involves an indirect method where degradation products of the polymer are determined by fluorometric methods according to Hummel.

By contrast, Applicants' method allows the direct determination of polyaspartic acid concentration independent from temperatures, pH-values or salt-contents in the aqueous solution. The direct measuring of polyaspartic acid and its fluorescence is much more precise than what has been described in the prior art before.

It is well-established that a 35 USC 102 rejection must rest upon the literal teachings of the reference and that the teachings must disclose every element of the claimed invention in as complete detail as is contained in the claim (See. *Jamesbury Corp v. Litton Industrial Products, Inc.* 225 USPQ, 253, 256 (CAFC 1985); *Kalman v. Kimberly-Clark Corp* 218 USPQ 781, 789 (Fed. Cir. 1983)). Hummel does not disclose every element of the claimed invention in as complete detail as is contained in the rejected claims. Hummel does not disclose each and every element of a claim with sufficient clarity to prove Applicants' invention existed in the prior art.


In view of the foregoing amendments and remarks, allowance of Claims 1-8 is
earnestly requested.

Respectfully submitted,

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